Abstract

Described is an application program interface (API) that enables dynamic modification to applications executing in a heterogeneous distributed computing environment. The application program interface includes a navigation function, a query function, a thread management function, and a modifier function. The navigation function returns program information for a local or remote computer (i.e., specified computing device). The query function returns information about a program on the specified computing device. The thread management function controls execution of other programs on the specified computing device. The modifier function modifies a system memory on the specified computing device that stores the heterogeneous program. The API works in conjunction with a hierarchical intermediate representation of the heterogeneous program such that pre-defined program tools can modify the intermediate representation and write these modifications to the specified computing device while the heterogeneous program remains operational.

27488

PATENT TRADEMARK OFFICE

24